Board of Governors of the Federal Reserve System

REPORT ON THE AUDIT OF THE BOARD'S AUTOMATED TRAVEL SYSTEM

OFFICE OF INSPECTOR GENERAL

November 2004

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

OFFICE OF INSPECTOR GENERAL

November 5, 2004

The Honorable Mark W. Olson
Chair, Committee on Board Affairs
Board of Governors of the Federal Reserve System
Washington, DC 20551

Dear Governor Olson:

The Office of Inspector General (OIG) of the Board of Governors of the Federal Reserve System (Board) is pleased to present its *Report on the Audit of the Board's Automated Travel System*. We began this audit late last year based on user concerns that the Board's new automated travel system, implemented in early 2003, did not meet expectations and was difficult to use. Our audit objectives were to evaluate the continued viability of the automated system as part of the Board's travel administration process, identify opportunities to improve the efficiency and effectiveness of future system implementations, and follow up on our 1997 *Report on the Business Process Review of Travel Administration*. Shortly after we began our audit, a review team, established by the Staff Director for Management, recommended discontinuing use of the new automated system and promptly returning to a paper-based process. As you know, the Committee on Board Affairs (CBA) accepted the review team's recommendation and the system was officially discontinued in February 2004.

Overall, we found that the automated travel system was a technically viable solution to the Board's travel administration requirements and we believe that the decision to discontinue the system after less than a year of operation was premature. The system offered several significant benefits to the Board (such as split payments between the user and the government travel card), facilitated document processing, and enhanced controls over travel expenditures. Furthermore, the review committee's recommendation to discontinue the system – based on user concerns, the expected system enhancement cost to address those concerns, and the belief that the system failed to deliver expected cost savings – was based on a limited period of system usage and incomplete cost information. Other government agencies we contacted that use the same automated system experienced hurdles similar to the Board, but overcame their obstacles through a variety of approaches such as pilot testing, enhanced training, and ongoing help-desk assistance.

The decision to discontinue the system has resulted in a hybrid approach to travel administration. Most divisions now prepare paper travel authorizations and vouchers which the Management Division (MGT) staff manually enter into the automated system. Some divisions, however, continue to use the system, at least in a limited capacity, for processing travel documents. We are concerned that this hybrid approach to handling travel administration is inefficient and increases the possibility of errors through duplicate data entry. Returning to a paper-based process is also inconsistent with current e-government initiatives and the Board's own objectives to reduce reliance on paper.

We are not recommending that the Board reinstitute the system at this time, given that staff resistance would likely outweigh any efficiencies that would be gained by such a change. Furthermore, the director of MGT has established two new evaluation groups to set requirements for the Board's travel administration process and develop an easy-to-use system that meets those requirements. We do believe, however, that greater oversight by the CBA of this new automation effort is essential to help avoid the types of problems that were encountered with the prior system. Greater oversight by the CBA, through regular status reports and briefings, will also help demonstrate senior management's commitment to successfully implementing a new automated travel system.

During our audit, we also identified specific areas in the system implementation process that we believe contributed to user concerns and the lack of Boardwide acceptance. Specifically, the project was not managed under a formal system life cycle methodology and there was a lack of user involvement and insufficient system training. Our report contains three recommendations designed to address these issues. The new evaluation groups' work addresses portions of our recommendations, but continued commitment to these initial efforts will be essential to a successful implementation. Our review of the automated system contract and related documentation also showed that the Board paid the software vendor for services not received and we have a fourth recommendation that the Board seek reimbursement. Towards that end, we have classified the $62,700 paid for these services as questioned costs. Our follow-up work on the status of action items from our 1997 business process review report showed that sufficient actions have been taken to close five of the eight open items. Appendix 1 to this report contains more specific information regarding our follow-up efforts.

We provided a copy of our report to the Staff Director for Management for review and comment. In his response, the Staff Director concurred with, and has taken actions to address, the three recommendations pertaining to the system implementation process. The Staff Director referred our fourth finding to the Legal Division for review and guidance on whether the Board should seek reimbursement for services not received. The Staff Director will make a management decision on this matter following the legal review.

We are providing copies of this audit report to Board management officials. The report will be added to our publicly available web site and will be summarized in our next semiannual report to the Congress. Please contact me if you would like to discuss the audit report or any related issues.

Sincerely,

Barry R. Snyder
Inspector General

cc: Governor Donald Kohn
Governor Edward Gramlich
Mr. Stephen Malphrus
Ms. Fay Peters

Board of Governors of the Federal Reserve System

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BACKGROUND

In September 2000, the Board of Governors of the Federal Reserve System (Board) issued a request for proposal (RFP) for an automated, web-based, travel expense management system to replace the Board's manual travel system. The Board was seeking a system that would be as paperless as possible and provide the greatest flexibility to the traveler in all stages of the travel process. The RFP called for a system that would " . . . minimize the duplication of data entry and maximize efficiencies through the use of traveler profiles and incorporating the Board's travel rules." The Management Division (MGT) took the lead in the project effort. An associate director of MGT served as the project lead, and MGT staff (primarily from the Finance Function) had the primary responsibility for developing the system requirements and managing the selection and implementation processes.

In June 2001 the Board awarded a $373,343 contract to a software vendor to provide a web-based travel system for the Board. The contract called for the Board to license use of the vendor's commercial-off-the-shelf software, which would be hosted on the vendor's hardware. The system was to interface with the Board's human resources system to provide traveler personnel data. Documents such as travel authorizations and expense vouchers were to be routed electronically to the appropriate approval authorities before processing, and the system was to have the capability to interface with the Board's government travel card vendor. In addition, the vendor was to establish an interface with the Board's financial system to provide accounting and budget information. Under the vendor-hosting arrangement, the vendor was also responsible for performing software updates, patches, and maintenance. The original contract included costs for the software licenses and maintenance fees for one year, as well as costs related to system implementation, user training, and establishing the web-hosted arrangement. In July 2002, the contract was revised to change the arrangement to a Board-hosted travel system, as the Board's firewall configuration precluded successfully establishing the original vendor-hosted arrangement. Nine months later, in March 2003, MGT rolled-out the new automated travel system to the Board's smaller divisions. As of June 2003, all divisions and offices were using the system for travel administration.

Shortly after implementation, however, there were complaints about the system from users throughout the Board. As a result, in September 2003, the Staff Director for Management formed the Travel Management Automation Review Committee consisting of employees who used the automated system and who represented the perspectives of several Board divisions. The review committee had a broad charter to identify problems and recommend solutions. In December 2003, the review committee submitted its findings and recommendation to the Committee on Board Affairs (CBA). The review committee's recommendations were to promptly return to the paper system; start over, and rethink the goals, objectives, and requirements of travel management; and communicate to the staff the basis of these decisions and the strategy for going forward. The CBA accepted the committee's recommendations and the automated travel system was officially discontinued for use by most divisions and offices in February 2004. At that time, the contract had been modified eleven times, adding costs such as project management support, maintenance, and additional implementation support. The contract

value as of the date the system was discontinued was $531,123, although the Board had only been invoiced for and paid $451,107.

Soon after the automated travel system was discontinued, the director of MGT established an Executive Steering Committee and a Focus Group to determine which travel administration system best fit the Board's requirements. The Executive Steering Committee is composed of senior managers from several divisions, with MGT leading the committee as the primary business owner. The deputy director of the Division of Information Technology (IT) is an advisor to the Executive Steering Committee and a liaison between the committee and the Focus Group. The Focus Group is chaired by a representative from IT and includes members representing all Board divisions and offices. These two groups are working together in an attempt to rethink the goals, objectives, and requirements of the Board's travel administration process; set requirements; and develop an easy-to-use system that meets these requirements.

OBJECTIVES, SCOPE, AND METHODOLOGY

We conducted our fieldwork from November 2003 through June 2004. Our audit objectives were to evaluate the continued viability of the automated travel system, implemented in 2003, as part of the Board's travel administration process; identify opportunities to improve the efficiency and effectiveness of future system implementations; and follow-up on the status of action items from the OIG's 1997 *Business Process Review of Travel Administration*. We performed our audit in accordance with generally accepted government auditing standards.

To accomplish our first two audit objectives, we reviewed the history of the automated travel system from inception to post-discontinuation activities. We reviewed supporting documentation, interviewed project team members, and interviewed representatives from ten divisions. We also spoke with representatives of other government agencies that use the same automated travel system software to discuss their experiences and identify any lessons learned. Additionally, we performed research on the travel automation initiatives within the Federal Reserve System as well as the federal government. To follow-up on actions taken regarding our 1997 report, we interviewed MGT staff and reviewed relevant documentation. The results of our follow-up work are contained in appendix 1 to this report.

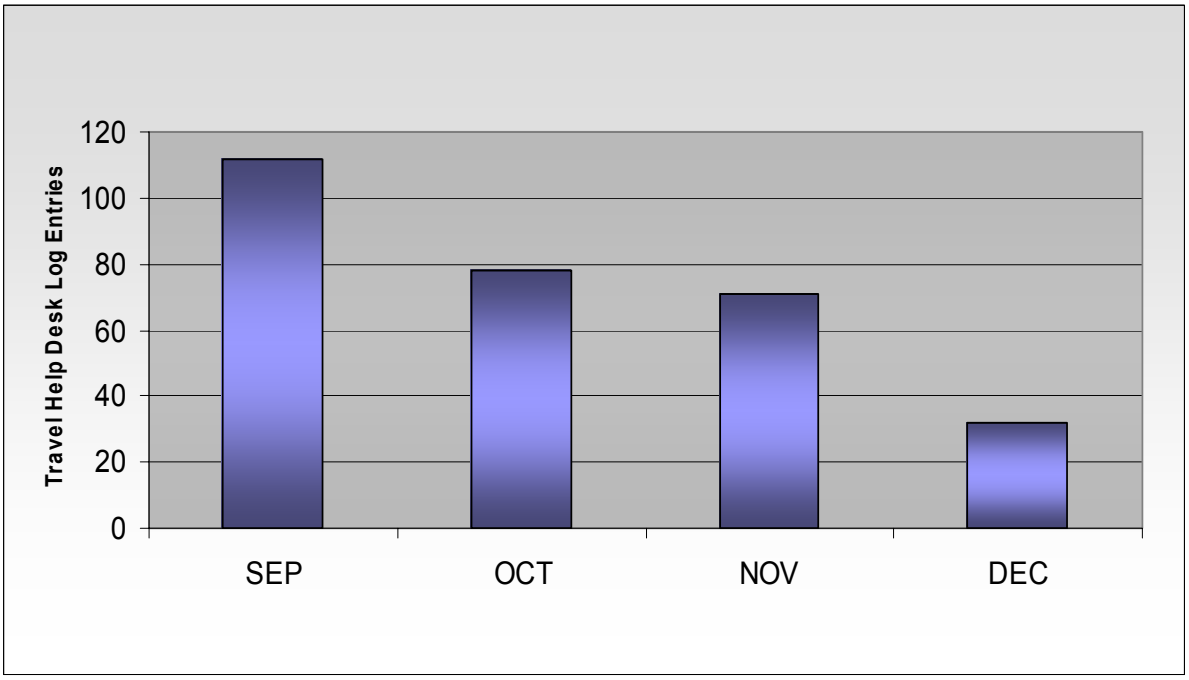
FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Overall, we found that the automated travel system was a technically viable solution to the Board's travel administration requirements. We believe that the decision to terminate the system was premature. Our fieldwork showed that the automated travel system offered several significant benefits to the Board that facilitated document processing and enhanced the control environment. The benefits included automated per diem calculation, automated document routing, an interface with the Board's financial system, and the ability to provide for split payments between the user and the government travel card. The system also automated

document processing controls by flagging transactions that were outside preset spending limits or that potentially violated Board travel policy. Despite these benefits, however, the system encountered significant user resistance. Users felt the system was difficult to use and failed to meet the full range of their requirements. Several of the control features added to the level of frustration, as users felt they wasted time resolving flagged transactions that they believed were not really control issues or policy violations. Based on the users' concerns, an estimated $280,000 cost for software modifications to address those concerns, and the conclusion that the system failed to deliver expected cost savings, the review committee recommended that the system be discontinued. The CBA's decision to accept the review committee's recommendation brought an end to the new system for most Board divisions and offices less than one year after the first users began processing transactions.

We believe the review committee's recommendation was made after too limited a period of system usage, with minimal data upon which to form a solid conclusion. As shown in figure 1, our analysis of information obtained from the travel section help desk showed that the number of requests for help declined as users gained experience with the system. We believe this trend would likely have continued as users became accustomed to the software. We also believe the review committee's report was incomplete in its cost analysis. Specifically, the report failed to take into account the cost to select and implement a new automated travel system, including the opportunity cost of staff time to redevelop requirements, analyze alternatives, and participate in system test and acceptance. In addition, the project leader concluded that the cost of the automated system was actually comparable to the paper process unless sunk costs were included in the analysis; costs which he concluded were irrelevant to a continuance decision.

Figure 1: Number of Help Desk Log Entries by Month, September 1 through December 18, 2003



The decision to discontinue the automated travel system has resulted in a hybrid approach to travel administration. Even though the decision was made for the Board to return to a paper process for travel administration, MGT travel staff and several divisions continue to use the system for document processing. Most divisions prepare hard copy travel authorizations and vouchers which are submitted to MGT travel staff for manual entry into the system. MGT decided to implement this hybrid approach to determine if it was more efficient for the finance and accounting staff to use the software and thus retain some of the processing benefits, rather than returning to a completely paper-based process. In addition, four divisions have requested to continue using the automated travel system, at least in a limited capacity. For these divisions, the division administrative staff generally enter information into the automated travel system on behalf of the traveler.[1] As a result, MGT staff is managing multiple travel administration processes. We believe this hybrid approach is inefficient and that MGT's manual reentry of hard copy data into the automated system increases the possibility of errors through duplicate data entry.

Maintaining a paper process is also inconsistent with the federal government's current e-government initiatives and the Board's own objectives to reduce reliance on paper. Our fieldwork showed that the automated system selected was designed on a standard government approach, and is being used by other government agencies to automate their travel processes. These agencies encountered implementation hurdles similar to those experienced by the Board. However, the agencies did not discontinue using the system, but overcame their obstacles through a variety of approaches including pilot testing, enhanced training, and ongoing help desk assistance.

We believe the automated travel system should have been allowed to continue operating while the new Executive Steering Committee and Focus Group reviewed alternatives. This would have provided additional information regarding system usage. MGT staff had already identified several relatively inexpensive system changes to address user concerns, and the upcoming new release of the software could have potentially provided additional enhancements. Even now, the Board could return to using the automated travel system while the Executive Steering Committee and Focus Group completes its work. We believe, however, that staff resistance at this time would likely outweigh any operational efficiency that would be gained by such a change.

During our audit we also identified areas in the system implementation process that we believe contributed to user concerns and the lack of Boardwide acceptance. Specifically, the project was not managed under a formal system life cycle methodology (LCM), and there was a lack of user involvement and insufficient system training. Our report contains three recommendations designed to address these issues. In addition, our review of the automated system contract and related documentation showed that the Board paid the software vendor for services not received and we have a fourth recommendation that the Board seek reimbursement. We have classified $62,700 paid for these services as questioned costs.

[1]During our fieldwork, we found that there was more acceptance of the new automated system in those divisions where the division support staff handled some of the data input versus users performing their own input.

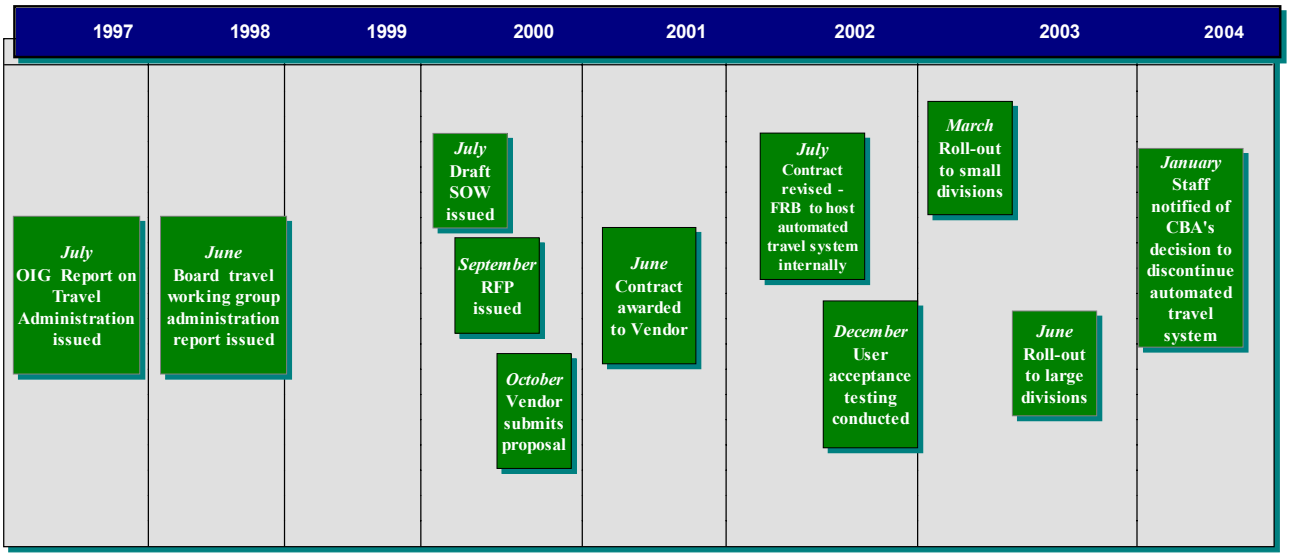
1. We recommend the Staff Director for Management ensure the ongoing travel system automation effort follows a formal system life cycle methodology to enhance overall project management.

Effective project management requires a carefully planned and organized effort to accomplish a specific and usually one-time result, such as implementing a new computer system. Project management entails developing a project plan, which includes defining project goals and objectives; detailing the specific tasks to be performed; and forecasting the required resources (people and dollars) to be expended over what timeframe. It also includes implementing the project plan in a phased approach with key deliverables and approvals at each phase before proceeding to the next one. Typical project phases include a feasibility study, project planning, implementation, evaluation, and support/maintenance.

One way to employ best practice project management for software projects involves using a LCM. A formal LCM is composed of several phases with multiple steps that provide for structuring and managing the project to ensure that key actions are performed to obtain successful implementation. During our fieldwork, we reviewed several methodologies, including the methodologies adopted by the Federal Reserve System, the Division of Banking Supervision and Regulation, the Division of Information Technology, and the U.S. Department of Justice. Although differing slightly in format and content, the LCM documents we reviewed all cover common system life cycle phases such as project concept, project planning, requirements analysis, system design, test and acceptance, and implementation. The methodologies all identify numerous activities and management techniques that can function as checks and balances in helping to ensure that appropriate actions are followed to attain the desired deliverables.

We found that the previous travel automation project did not use a defined LCM for organizing the project's components and activities. The project manager informed us that some phases of a LCM were covered over the course of the project, however no formal framework for structuring and managing the automated travel system initiative was in place. As a result, certain project management activities were not followed or could have been more strictly applied. For example, the project team did not prepare a comprehensive project plan until the decision was made to change from a vendor-hosted to a Board-hosted application in July 2002. Preparing a project plan from the outset of the automation effort would have communicated the project's specific goals, objectives, and strategies to all project participants, as well as established project completion targets. Figure 2 shows the complete timeline for the automation effort which spanned almost three years from RFP through full implementation. Going forward with the new automation effort, a project plan should identify specific deliverables and milestones and provide a basis for measuring the project's progress and success in meeting its goals and objectives.

Figure 2: Automated Travel System Timeline Summary



The plan should also identify resource requirements, including what personnel are needed and when their participation is required. We found that the project team did not fully utilize available information technology expertise and also lacked Boardwide representation. The team was led by, and composed primarily of, MGT staff. There was a lack of ongoing information technology expertise, either from the technology staff within MGT or from IT. Although technology personnel were utilized for certain aspects of the project, they were not included as ongoing project team members over the course of the entire project. We also noted there was a lack of Boardwide representation on the project team. Considering that the automated travel system affects all travelers throughout the Board, representation by all divisions in providing input to requirements so that division-specific travel concerns were considered might have increased the level of system acceptance from the senior division management to the day-to-day users of the system.

Using a LCM approach would also have proven helpful to ensure that all systems development steps were followed and properly documented. We noted, for example, there was inadequate project team and managerial sign-off at the completion of project deliverables. Requiring such review and sign-off first at the team level and then at the supervisory or managerial level can help ensure that all technical aspects of a phase or project component are covered, that key steps are not overlooked prior to moving on to the next phase, and that all project participants are in agreement that the deliverables have been completed.

We note that the new Focus Group established to determine which automated system best fits the Board's requirements has a project leader from IT and includes representatives from all Board divisions and offices. The Focus Group has elected to follow IT's LCM and has begun reviewing business processes, conducting risk assessments, and identifying requirements. The Staff Director should ensure, either through periodic briefings or status reports, that the group's initial efforts at following a LCM are carried through the remainder of the new automation effort

to help manage the remainder of the project. The Staff Director's oversight should include ensuring that the project's goals and objectives, milestones, and deliverables are identified, effectively communicated, and managed throughout all phases of the LCM.

2. We recommend that the Staff Director for MGT ensure the travel system automation effort includes division input on user requirements and incorporates user acceptance testing and pilot testing to validate requirements and system functionality.

To ensure that users are actively involved in, and fully committed to, achieving the goals and objectives set when implementing a new system, functional users need to be active members of the project management team—from obtaining requirements, to participating in acceptance testing, to validating requirements and system functionality throughout the development and implementation of the system. By establishing the functional users as stakeholders in project management, the project should have better communication and coordination among end users, managers, and technical staff. Active functional user involvement will also foster increased ownership and commitment to the project so that it meets the Board's goals and business needs as efficiently and effectively as possible.

We found that system requirements were developed within MGT with minimal input or involvement from division users. As a result, the system addressed finance and accounting concerns but it did not fully address user concerns as demonstrated by the limited user buy-in or satisfaction with the system when it was eventually implemented. MGT staff told us there was a travel working group established in 1998 comprised of representatives from several divisions that performed a review of the travel process and identified requirements for an automated travel system. The group issued a report in June 1998 that discussed nineteen areas related to travel administration. MGT staff indicated that this report contained user requirements from most divisions. However, the report's topics focus on travel policies and procedures such as making the travel authorization process more efficient, making travel reservations, and using the government charge card. The report does not address detailed automation requirements such as those outlined in the statement of work that was prepared for the automated travel system request for proposal.

We also found there was limited user acceptance testing of system functionality and the feedback that was obtained was not used to make system changes. Over the approximately twenty-one months from contract award to system implementation, there was only one user acceptance test performed in late 2002. The test included twenty-one individuals and the results identified concerns with user friendliness and document processing. For example, when users were asked to rate the ease of using the system, twelve individuals felt that the system was hard, difficult, or not easy to use. When asked to rate the level of effort needed to enter a travel authorization, thirteen users felt the process was confusing or hard to understand. No modifications to the system were made based on user acceptance test results, however, because the project team felt that training would address these concerns. There was also some discussion regarding a pilot test prior to rolling the system out to all divisions. A pilot test would likely have identified additional user concerns and helped focus training efforts or define an appropriate roll-out strategy. However, no pilot testing was ever conducted.

Having limited user involvement during the user requirements phase and performing only one user acceptance test resulted in a system that users felt was not intuitive, not user friendly, and difficult to use. Users we spoke with identified several concerns that we believe might have been avoided through additional up-front involvement in setting requirements and additional acceptance testing. Specifically, users told us they felt that navigating through the system from screen to screen was not logical, the approval process was too difficult, entering the information needed was too time consuming, and the system had too many screens and too many steps compared with the paper system.

We note that the current review team has begun to address this issue by including all divisions on the project team. This level of Boardwide representation will need to be maintained to ensure that user needs are fully addressed. To help ensure that user requirements are adequately integrated into the final solution, we suggest that the team begin test planning at the same time that the requirements are gathered. We further suggest that the team write the test plan based on the requirements document such that each requirement has an associated test or tests to verify that the requirement is met. We also suggest that the test environment should be set up to simulate, as closely as possible, the environment under which users will eventually work.

3. We recommend that the Staff Director for Management ensure future system training efforts be enhanced by adequately covering division specific needs; developing well-designed, user-friendly system aids; and establishing a travel help desk at initial system roll-out.

Automating administrative functions can represent a significant change for many individuals and one way to help manage that change is to ensure that sufficient training and on-going user assistance is available to resolve problems, identify opportunities for system enhancements, and manage user expectations. During 2003, the Board employed several mechanisms to help users adapt to the new automated travel system. We found, however, that the use and acceptance of the automated system was impacted by training that did not include all potential users of the system and was limited in scope and duration, system travel aids that were not user friendly, and the lack of a help desk as part of initial system implementation.

System training was provided to only two categories of Board staff during early 2003. The training, conducted by a former Board employee hired as a consultant, consisted of a three-hour session for frequent travelers and a one-day session for division facilitators. There were no classes for infrequent travelers, who we believe might have benefited the most from receiving hands-on training. The facilitator training was designed to help the Board implement a train-the-trainer approach, in which trained facilitators for each division would be available to provide guidance and assistance to other members of their division. However, the request to division directors for system facilitators received a poor response and the bulk of the train-the-trainer effort defaulted to division administrators. We interviewed seven administrators representing eight divisions. Five of these seven administrators told us they felt training did not effectively address their needs or that the consultant conducting the training was not familiar with the divisions' travel processes. The administrators also told us that the training did not meet their division's expectations or requirements. Specifically, they felt that topics such as international

travel, blanket travel authorizations, and the details on available system reports were not adequately addressed.

Other government agencies we spoke with using the same automated travel system employed various training techniques to assist users with the new software. For example, two agencies conducted training over several days and one of the two mandated training for all staff. Another agency established a training database that allows users to walk through procedural steps. Other training actions adopted by government agencies include desk-side training for approving officials and quarterly travel classes for users desiring additional training. We also found that other agencies successfully implemented the train-the-trainer approach. We believe this technique can help address division-specific requirements by providing a valuable division-level resource to answer questions and facilitate transitioning to a new system. One agency also used trainers from multiple sources. The Board may want to consider whether such training would be more effective, and better address the Board's needs, if classes were taught jointly by individuals familiar with the software package as well as the Board travel administration process.

To assist users with the new software, MGT staff also developed reference documents (referred to as job aids) as guides to using the travel system. We found, however, that the job aids were not met with much user acceptance. For example, feedback from the user acceptance test that MGT conducted in late 2002 showed that only eight of the twenty-one participants agreed that the job aids were easy to use; only ten responded that the aids were helpful in using the travel software. Determining why so many respondents disagreed or were neutral to these questions could have identified opportunities to enhance the job aids and minimize any confusion or complaints. To MGT's credit, they realized that the job aids needed modification and were in the process of streamlining the documents when the system was discontinued. We also found that the job aids were not fully integrated in the software and that the application's on-line help module provided limited coverage of the system's functionality. If users needed the job aids or the Board's travel administration policy to complete processing, they had to go outside the system to other MGT intranet links. In contrast, our analysis of the new travel application being implemented by the Federal Reserve Banks showed that developers placed links to the detailed help information as well as to the travel policies directly above the application travel screens.[2] This design provides easy access to the information and can help to minimize user confusion.

We also believe that future system training efforts could be enhanced by establishing a help desk when the system is initially rolled out. We found that MGT did not establish a formal help desk until the middle of August 2003, approximately five months after the travel system was rolled out to the smaller Board divisions and two months after the larger divisions began using the new system. MGT staff told us that the Board's travel staff actually began responding to user inquiries from the beginning of system usage, but the division did not formally begin tracking inquiries until it created the separate help desk in August. Establishing a help desk at the beginning of system roll-out can provide users with a formal focal point to direct questions and provide additional data to help identify any cumbersome or confusing aspects of the system that could be addressed through additional training, enhanced job aids, or system modifications.

[2]The Federal Reserve Bank of San Francisco developed an automated travel system that is currently being used by several Reserve Banks and was recently selected as the new Federal Reserve System standard travel application.

4. We recommend that the director of MGT seek reimbursement for services paid for but not received.

In June 2001, the Board entered into the one-year contract with a vendor to web-host the automated travel system. A web-hosting arrangement allows the vendor to manage the entire process—transaction processing, traveler reimbursement, credit card payment, application monitoring, and system monitoring and backup—from its location. The initial contract price included one-time costs for software licenses, implementation, consultation, training, and setting up the web-hosting service. The original contract price also included annual fees for software maintenance and a transaction-hosting service subscription. The first year subscription fee of $62,700 was based on the Board's processing up to 7,500 transactions per year through the vendor's web-hosted environment. The contract defined a transaction as, ". . . the use of Software to request reimbursement for an expense or trip, culminating in the submission of an Expense Report/Voucher." The Board paid the costs for the software licenses, the first year of software maintenance, the web-hosting service set-up, and the first-year web-hosting service subscription shortly after the contract was signed. The annual fees were projected to increase in each of the four contract option years.

During the contract's first year, the Board encountered several operational issues in attempting to establish the web-hosting service with the vendor. The most significant issue involved firewall security and sharing data via the web. As a result, the Board decided to change the system arrangement from a vendor-hosted service to a Board-hosted environment. In June 2002, the Board provided the vendor with a proposed change order to modify the contract for the hosting change. The proposed change order also requested that the vendor provide an accounting of credits for services paid by the Board but not yet provided by the vendor. The vendor responded that it was their belief there were no credits due the Board. However, the vendor offered to extend the original maintenance period for 120 calendar days and to provide the Board an additional year of free software maintenance. The Board modified the contract in July 2002 to incorporate the vendor's proposal.

The system did not become operational until March 2003 after the hosting arrangement was changed so that the Board hosted the application and thus internally processed all transactions. There were no transactions processed during the first year of the contract—when the system was configured in a vendor web-hosted environment—other than transactions that may have been processed by the project management team as part of system modification and testing. While we recognize the vendor expended efforts assisting the Board with trying to establish a web-hosted environment, the Board paid a hosting service set-up fee of $25,000 in 2001 which we believe reimbursed the vendor for this service. We believe the vendor should reimburse the Board $62,700 for the hosting subscription service fee paid in 2001.

ANALYSIS OF COMMENTS

We provided a draft copy of our report to the Staff Director for Management for his review and comment. The Staff Director's response is included as appendix 2 to this report. The Staff Director concurred with, and has taken actions to address, our three recommendations pertaining to the system implementation process. Specifically, the Staff Director shared these recommendations with the deputy director of IT who is leading the steering committee evaluating automated travel system alternatives. The Staff Director referred our fourth recommendation to the Legal Division for review and guidance on whether the Board should seek reimbursement for services not received. The Staff Director will make a management decision following the legal review and we will evaluate actions taken at that time.

APPENDIXES

Appendix 1 – Follow-up of our 1997 *Report on the Business Process Review of Travel Administration*

In 1997, the Board's Office of Inspector General issued a report titled *Report on the Business Process Review of Travel Administration* (A9702). The report contained nine action items designed to help the Board reengineer the travel administration processes. Our follow-up work completed in 1999 closed one of those items which allowed senior management at the director level and above to authorize their own travel. Our current follow-up work found that the Board has taken measures to close five action items. Specifically:

- Travelers are encouraged to take advantage of discount airfares when making a flight reservation and Board policy was changed to allow payment of expenses incurred during an extended stay necessitated by using discount airfares when cost justified.

- An incentive program was established that encourages travelers to accumulate and redeem frequent flyer benefits for free airline tickets for future Board travel. In addition, travelers are allowed to keep frequent flyer miles for their personal use.

- The government travel card (GTC) program has been fully implemented and permanent advances given to staff currently on continuous travel were reclaimed.

- MGT's efforts to arrange electronic data interchange from a contracted travel agency for recording air and rail ticket expenses to the Board's financial system are no longer required due to the implementation of the Board's GTC process.

- An automated notification system to help collect funds due the Board is no longer required since the Board no longer provides cash advances. Travelers now use the GTC to pay for their expenses and the payment becomes the traveler's responsibility.

The three remaining action items relate to automating the travel authorization process, automating the expense voucher process, and outsourcing the Board's transportation reservation system. We are leaving these items open and we will review actions taken after the Board completes ongoing work related to automating travel administration.

Appendix 2 – Staff Director's Comments

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

STEPHEN R. MALPHRUS
STAFF DIRECTOR FOR MANAGEMENT

DATE: October 18, 2004

TO: Barry Snyder

FROM: Steve Malphrus ***/signed/***

SUBJECT: Response to OIG's Audit of the Board's Automated Travel System

We appreciate the opportunity to comment on the draft report of the OIG's audit of the Board's automated travel system. We concur with recommendations one, two, and three and have taken action to implement them. We have referred recommendation number four to the Legal Division for review, and we will make a management decision after the review. The following comments provide additional perspective on the findings and proposed management actions.

The OIG identified areas in the system implementation process for the automated system that contributed to user concerns and the lack of Boardwide acceptance. Specifically, the OIG believes the project was not managed under a formal system life-cycle methodology and that there was a lack of adequate user involvement and insufficient system training. The first three recommendations address these issues. We also shared the OIG's recommendations with the deputy director, IT Division, who is leading the steering committee evaluating automated system alternatives under the chairmanship of the director of the Management Division.

Recommendation 4: "We recommend that the director of MGT seek reimbursement for services paid for but not received."

The OIG noted that we initially contracted with a vendor for the company to web-host the automated travel system. There were one-time costs associated with the set-up as well as a subscription fee that was based on an estimate of transaction volume. The vendor could not establish the web-hosted service for the Board, however, due primarily to the complexity of the Board's firewalls that are configured to meet the high security requirements of the Federal Reserve System. We subsequently entered a change order for the vendor to run the application in our environment. We also renegotiated with the vendor to provide other services as an offset to the subscription fee since we did not process transactions in the web-hosted environment. We agreed to contract modification number one in July 2002, to accept the vendor's services for the subscription fee amount that included:

Appendix 2 – Staff Director's Comments (con't)

1) extending the original maintenance period for four months,
2) providing one year of software maintenance,
3) providing one-day training on site for up to four students, and
4) reducing the rate for implementation specialist services.

Following receipt of the OIG's recommendation, we forwarded the contract and the OIG's report to the Legal Division and asked for guidance as to whether we should seek reimbursement from the vendor. The Legal Division is currently considering the matter, and we will make a management decision regarding next steps following the review.

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Appendix 3 – Principal Contributors to this Report

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